

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listings of Claims:

1. (currently amended) A semiconductor device comprising:

a semiconductor substrate comprising a region of a first conductivity type, a top electrode being in electric contact with a top surface of said substrate, a bottom electrode being in electrical contact with a bottom surface of said substrate;

a field shield region of a second conductivity type, said field shield region being laterally bounded by dielectric sidewalls, said dielectric sidewalls separating said field shield region from said region of the first conductivity type, said field shield region being bounded from below by a PN junction with said region of the first conductivity type; and

a shield electrode in electrical contact with the field shield region ~~and with the top electrode.~~

2. (currently amended) The device of Claim 1 wherein the electrical contact between the shield control electrode and the field shield region is ohmic.

3. (original) The device of Claim 1 wherein the electrical contact between the top electrode and the top surface is ohmic.

4. (original) The device of Claim 1 wherein the electrical contact between the top electrode and the top surface comprises a Schottky barrier.

5. (original) The device of Claim 1 wherein the electrical contact between the bottom electrode and the bottom surface is ohmic.

6. (original) The device of Claim 1 wherein the electrical contact between the bottom electrode and the bottom surface comprises a Schottky barrier.

7. (original) The device of Claim 1 comprising a vertical JFET with ohmic bottom and top electrodes.

8. (original) The device of Claim 1 wherein the contact between the top electrode and the top surface of said substrate is a Schottky barrier contact and the contact between the bottom electrode and the bottom surface of said substrate is ohmic.

9-37 (canceled)

38. (new) The device of Claim 1 wherein the shield electrode is in electrical contact with the top electrode.